

WHAT IS CLAIMED IS:

1. A network surveillance video camera system using a network comprising:

5 a plurality of video camera units, each having a different address and generating video data, each including motion detection means for detecting a motion of an image from said video data and communication means for communicating with said network to transmit said video data and an output of said motion detection means;

10 storing means, having a different address and communication means for communicating with said network, for receiving and storing said video data from said video camera units through said network;

15 displaying means, having a different address and communication means for communicating with said network, for displaying said video data from said storing means and said video camera units; and

20 control server coupled to said network having a different address for automatically communicating with said network to control said addresses of said video camera units, said storing means, and said display means.

2. A network surveillance video camera system as claimed in claim 1, wherein at least one of said camera units
25 further comprises a memory for storing said video data and

traffic detection means for detecting a traffic amount of said network and comparing said traffic amount with a reference and transmitting, to said displaying means, only a portion of said video data regarding that said motion

5 detection means detects said motion when said traffic amount exceeds said reference.

3. A network surveillance video camera system as claimed in claim 1, wherein at least one of said camera units
10 further comprises a microphone for generating sound data and traffic detection means for detecting a traffic amount of said network and comparing said traffic amount with a reference and transmitting said sound data to said
displaying means as well as inhibiting to transmit said
15 video data when said traffic amount exceeds said reference and said displaying means further comprises a speaker for reproducing said sound data.

4. A network surveillance video camera system as claimed
20 in claim 1, wherein at least one of said video camera units further comprises a memory for storing said video data in response to said motion detection means, sensor input means for receiving a sensor signal, and thinning means for
thinning said video data in said memory to transmit said
25 thinned video data to said network.

5. A network surveillance video camera system as claimed in claim 1, wherein each of said video camera units includes:

5 sensor input means for receiving a sensor signal;
and

 alarm signal generation means for generating alarm data in response to said sensor signal and said motion detection means to transmit said alarm data and data
10 regarding said alarm data including said sensor signal to said control server and said control server further includes:

 data base for storing sets of said alarm data and said data regarding said alarm data;

15 input means for inputting keyword data and mark data;
 searching means for searching said alarm data in said data base in accordance with said keyword; and

 data base control means for storing said mark data in response to said input means with correspondence with
20 one of said sets of said alarm data to inhibit searching means from searching one of said sets of said alarm data corresponding to the mark data.

6. A network surveillance video camera system as claimed
25 in claim 1, wherein each of said video camera units further

includes:

pivoting means for changing an optical axis of said video camera unit in accordance with control data; and

position data generation means for generating

5 position data of said pivoting means;

time data generation means for generating time data;

alarming means responsive to a sensor signal and

said motion detection means for generating alarm data and

alarm type data and transmitting said alarm data, said

10 alarm type data, alarm sub-data, including said position data and said time data, and said address of said video camera unit; and said control server further includes:

a table storing relation between addresses of said video camera units and data of installation places of said

15 video camera units; and

control means for receiving said alarm data from one of said video camera units, obtaining said position data and said data of installation place of said one of video camera units which transmits the alarm data, and

20 transmitting said alarm data, said alarm type data, said data of installation place of said one of said video camera units, and alarm sub-data including said position data and said time data, and said address of said one of video camera units, to said displaying means.

7. A network surveillance video camera system as claimed
in claim 1, wherein at least one of said video camera units
further comprises microphone means for receiving a sound
signal around said each video camera unit and generating
5 sound data from said sound signal, comparing means for
comparing a level of said sound data with a reference,
alarm means for generating alarm data when said level
exceeds said reference, and a switch for either
transmitting said alarm data or not transmitting said alarm
10 data to said network.

8. A network surveillance video camera system as claimed
in claim 1, at least one of said video camera units
includes a CCD imager for successively generating said
15 video data with an exposure interval and brightness level
detection means for detecting a brightness level, and
exposure control means for changing said exposure interval
from a first exposure interval to a second exposure
interval, which is longer than said first exposure interval.
20 and for changing a transmitting interval of said video data
from a first interval to a second interval which is longer
than said first interval to prevent said video camera unit
from transmitting the same field or frame of video data
twice, when said brightness level is less than said
25 reference brightness level.

9. A network surveillance video camera system as claimed
in claim 1, wherein said control server generates an
address table of said plurality of video camera units and
5 transmits said address table to said storing means, said
storing means further comprises storing means for receiving
and storing said address table and monitoring means for
monitoring said network to receive and store said video
data from said video camera units within said network
10 surveillance video camera system.

10. A network surveillance video camera system as claimed
in claim 1, wherein said control server generates an
address table of said plurality of video camera units and
15 transmits said address table to said display means, said
display means further comprises storing means for receiving
and storing said address table and monitoring means for
monitoring said network to receive and display said video
data from said video camera units within said network
20 surveillance video camera system.